Transitioning Face-to-Face Learning to Online Learning: Describe the Problems Faced by High School Teachers

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**Abstract.** The widespread impact of the coronavirus or COVID pandemic since 2019 has down to classrooms where face-to-face learning happens are held between teachers and students, in terms of delivering learning information. Mostly, face-to-face learning is replaced by virtual learning, by relying on information technology-based resources and facilities. This sudden situation, of course, cannot be accepted by students directly, and also be faced by teachers. We have collected data using a questionnaire from 741 middle school teachers in West Sumatera, Indonesia. The teachers who fill in are from different educational backgrounds, genders, ages, and school affiliations. We found that 66\% of the problems reported were internet disturbances, 20\% were misconceptions, 10\% did not state types of problem and last 4\% did not implement online learning.

**Keywords:** COVID-19 · Face-to-face · Online learning · High school teachers

1 Introduction

The coronavirus, which became a global pandemic starting in 2019, has an impact on all humans in various aspects. This has an impact on changing human social patterns. The disease caused by this virus is transmitted when a healthy person inhales respiratory droplets from an infected person or touches a contaminated [1]. Everyone adapts to changing old habits into new habits, in the new normal life. So, people continue to carry out routines and reduce the rate of the spread of the virus [2]. Including in the implementation of education in schools. Learning can no longer be done normally in the classroom. Teachers and students can no longer meet in person, due to the implementation of lockdown and social distancing, in most countries in the world. Then continued with the implementation of university closures as a result of the pandemic [3]. However, learning targets must still be achieved properly. Learning must continue so that education occurs as it should. An effort to resolve this conflict is through online learning, including in West Sumatra, Indonesia. Online learning is effective because it is easy, but often inefficient in terms of cost [4].

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The Indonesian government requires the implementation of online learning during the COVID-19 pandemic. Online learning is applied by teachers and students by utilizing advances in information technology, the Internet. With the Internet, teachers can connect with students through various media, such as e-learning, conversation applications, e-mail, and so on. This will greatly assist the implementation of learning during this pandemic.

Internet requires devices with electronic bases and networks. Because the pandemic happened suddenly, education implementers were not ready to face the situation, where they had to have good standards. For example, in West Sumatra, Indonesia, there are still many sub-districts that do not have access to the internet, and there are still many students with low economic levels who do not have cell phones, even though they do have them, they are used interchangeably in the family. On the other hand, teachers also experience problems in preparing themselves for the use of digital devices [5] and the ability to use the device [6].

The problems of online learning include students who are not ready to learn [7], low academic integrity [8] and difficulties to achieve good learning goals [9]. However, there is no data on the difficulties of teachers implementing online learning in West Sumatra, Indonesia. Surely this needs to be done to develop a learning improvement plan. So, based on this explanation, we conducted research and wrote this article.

2 Methods

This research was carried out with a descriptive method. The article contains data obtained using a questionnaire on 741 secondary school teachers in West Sumatra, Indonesia. Respondents did not write their names on the questionnaire, they differed by affiliation, age, gender, and education level. The instrument used is valid and reliable. The data obtained were tabulated and presented in Table 1.

3 Result and Discussion

In the table, we provide data about four criteria of findings in this study. The first is internet disturbance. Conditions where teachers are disturbed to interact with students, due to internet service interruptions. Second, misconceptions. Students who often do not understand the concept correctly. Third, not stated, a condition where the teacher does not want to provide answers to the questions we have given. Lastly, no online, the teacher does not do online learning.

The first problem is internet interference. In West Sumatra, Indonesia, there are 404 internet blind spots in 2020 [10]. This situation is due to topographical problems, so

<table>
<thead>
<tr>
<th>Problems</th>
<th>Internet Disturbance</th>
<th>Misconception</th>
<th>Not Stated</th>
<th>No Online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>66</td>
<td>20</td>
<td>10</td>
<td>4</td>
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the Base Transceiver Station (BTS) tower cannot be built. Furthermore, some areas still use copper cables to run the internet. So, in certain natural conditions, such as rain and storms, internet service will slow down [11]. By using a copper cable that is electrified to run the internet, it will have an impact when the power goes out. The internet will also be off.

The second problem is students’ misconceptions. Misconceptions are generally caused by teachers who don’t really understand the material and they also don’t care enough about their students [12]. Misconceptions that generally occur due to accident can be measured using the two-tier test [13] and three-tier test [14]. Actually, misconceptions can be prevented by using the discovery-inquiry learning model [15], drill method [16], Cooecaer model [17], cognitive-conflict strategy [18], fun and game method [19], and others. Misconceptions occur in students regardless of their gender and age [20], and regardless of their type of learning style. Thus, choosing a method to prevent misconceptions must be based on a proper analysis of the situation [21].

Our next finding was that the teacher did not want to answer what we asked. This is because teachers feel uncomfortable stating the difficulties they have experienced. We appreciate that. Next, we find that teachers do not carry out online learning. Due to things that cannot be disclosed, we do not explain them in this article. We suspect the teacher does not understand what online learning is all about.

In addressing the existing problems, the teacher improvised. For example, the teacher postpones the assignment time, or study time for students whose internet service is interrupted during their study schedule. Teachers are more flexible towards students with these conditions. Although it may take longer, it is a good solution. Furthermore, to the problem of misconceptions, some teachers repeat several times delivering the material, applying special methods, and giving assignments so that students understand more what they are learning.

4 Conclusion

After conducting the research, we conclude that in West Sumatra, Indonesia, most online learning is interrupted due to internet services. Others are due to misconceptions that occur. The teacher applies a temporary solution to these obstacles, but a mutual agreement between various parties is needed to resolve this problem so that in the future it can be solved easily.

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References


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